

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Petition No. 1425

Gaylord Mountain Solar Project 2019, LLC, Petition for a Declaratory Ruling, Pursuant to Connecticut General Statutes §4-176 and §16-50k, for the Proposed Construction, Maintenance and Operation of a 1.9-Megawatt AC Solar Photovoltaic Electric Generating Facility Located at 360 Gaylord Mountain Road in Hamden, Connecticut, and Associated Electrical Interconnection

Zoom Remote Council Meeting (Teleconference), on Thursday, January 7, 2021, beginning at 2 p.m.

Held Before:

JOHN MORISSETTE, Member and Presiding Officer

1	Appearances:
2	Council Members:
3	
4	JOHN MORISSETTE, (Hearing Officer)
5	
	ROBERT HANNON,
6	DEEP Designee
7	
8	QUAT NGUYEN,
9	PURA Designee
10	
11	ED EDELSON
12	MICHAEL HARDER
13	
14	Council Staff:
15	MELANIE BACHMAN, ESQ.,
16	Executive Director and Staff Attorney
17	
18	FRED CUNLIFFE,
19	Siting Analyst
20	
21	LISA FONTAINE,
22	Fiscal Administrative Officer
23	
24	AARON DeMAREST,
25	Sound Engineer

1	Appearances:(cont'd)
2	For Gaylord Mountain Solar Project 2019, LLC
3	(Petitioner):
4	ROBINSON & COLE, LLP
5	280 Trumbull Street
6	Hartford, Connecticut 06103-3597
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11	INTERVENER PARTY:
12	SHAWN O'SULLIVAN (pro se)
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THE HEARING OFFICER: This continued remote evidentiary hearing is called to order this Thursday, January 7, 2021, at 2 p.m. My name is John Morissette, member and presiding officer of the Connecticut Siting Council.

As everyone is aware, there is currently a statewide effort to prevent the spread of the coronavirus. This is why the Council is holding this remote hearing and we ask for your patience.

If you haven't done so already, I ask that everyone please mute their computer audio and/or telephones now.

A copy of the prepared agenda is available on the Council's Petition Number 1425 webpage along with the record of this matter, the public hearing notice, instructions for public access to this remote public hearing, and the Council's citizen's guide to Siting Council procedures.

I will ask other members of the Council to acknowledge that they are present when introduced for the benefit of those who are only on audio.

Mr. Harder?

MR. HARDER: Present.

THE HEARING OFFICER: Thank you.

Mr. Hannon?

- 1 MR. HANNON: I am present.
- THE HEARING OFFICER: Thank you. Mr. Nguyen?
- MR. NGUYEN: Present. Thank you, Mr. Morissette.
- 4 THE HEARING OFFICER: Thank you.
- 5 Mr. Edelson.
- 6 MR. EDELSON: Present. Thank you.
- 7 THE HEARING OFFICER: Thank you.
- 8 Executive Director Melanie Bachman.
- 9 MS. BACHMAN: Present, thank you.
- 10 THE HEARING OFFICER: Thank you.
- 11 Supervising Siting Analyst Fred Cunliffe.
- 12 MR. CUNLIFFE: Present.
- 13 THE HEARING OFFICER: Thank you.
- 14 Fiscal Administrative Officer Lisa Fontaine.
- 15 MS. FONTAINE: Present.

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16 THE HEARING OFFICER: Thank you.

This evidentiary session is a continuation of
the remote public hearing held on November 17,
2020, and December 15, 2020. It is held pursuant

to the provisions of Title 16 of the Connecticut

General Statutes and of the Uniform Administrative

Procedure Act upon a petition from Gaylord

Mountain Solar Project 2019, LLC, for a

declaratory ruling pursuant to General Statutes

Section 4-176 and 16-50k for the proposed

construction, maintenance and operation of a 1.9-megawatt AC photovoltaic electric generation facility located at 360 Gaylord Mountain Road in Hamden, Connecticut.

Please be advised that the Council does not issue permits for stormwater management. If the proposed project is approved by the Council; the Department of Energy and Environmental Protection, the stormwater permit is independently required. DEEP could hold a public hearing on a stormwater permit applications.

Please be advised that the Council for the South Central Regional Water Authority submitted correspondence into the record dated January 6, 2021, indicating that it will not be conducting cross-examination and has no objection to the admission of late-filed exhibits.

A verbatim transcript will be made of this hearing and deposited it the Hamden and Bethany Town Clerk's office for the convenience of the public.

We will now proceed with the appearance of the Intervener Sean O'Sullivan.

Attorney Bachman, can you please begin by swearing in the Intervener's witnesses?

1	MS. BACHMAN: Thank you, Mr. Morissette.
2	Is Mr. O'Sullivan and Ms. Gadwa available?
3	SHAWN O'SULLIVAN: She said she was going to be
4	joining. She doesn't look like she's on right
5	now. Is that correct?
6	MS. BACHMAN: We have someone Suki. I'm not sure if
7	that's her.
8	SIGRUN N. GADWA: That actually is me.
9	SHAWN O'SULLIVAN: Oh, good.
10	SIGRUN N. GADWA: That's my nickname.
11	MS. BACHMAN: Okay. Well, we'll definitely get you
12	renamed there, Ms. Godwa.
13	SIGRUN N. GADWA,
14	SHAWN O'SULLIVAN,
15	called as witnesses, being first duly sworn
16	by the Executive Director, were examined and
17	testified under oath as follows:
18	
19	THE HEARING OFFICER: Mr. O'Sullivan and Ms. Gadwa, you
20	have offered the exhibits listed under the hearing
21	program as Roman numeral 4B, one through five, for
22	identification purposes.
23	Is there any objection to making these
24	exhibits for identification purposes only at this
25	time? Attorney Baldwin?

1 MR. BALDWIN: No objection at this time, 2 Mr. Morissette. Thank you. 3 THE HEARING OFFICER: Thank you. Mr. O'Sullivan and Ms. Gadwa, did you prepare 4 5 or assist in the preparation of these documents? 6 THE WITNESS (Gadwa): Yes. 7 THE WITNESS (O'Sullivan): Yes. 8 THE HEARING OFFICER: Do you have any additions, 9 clarifications, deletions or modifications to 10 those documents? 11 THE WITNESS (Gadwa): No. 12 THE WITNESS (O'Sullivan): I do not. 13 THE HEARING OFFICER: Thank you. Are these exhibits 14 true and accurate to the best of your knowledge? 15 THE WITNESS (Gadwa): They are. 16 THE WITNESS (O'Sullivan): They are. 17 THE HEARING OFFICER: Thank you. And do you offer 18 these exhibits as your testimony here today? 19 THE WITNESS (Gadwa): I do. 20 THE WITNESS (O'Sullivan): Yes. 21 THE HEARING OFFICER: And do you offer these as full 22 exhibits? 23 THE WITNESS (O'Sullivan): Yes. 24 THE WITNESS (Gadwa): Yes. 25 THE HEARING OFFICER: Does the Petitioner object to the admission of Shawn O'Sullivan's exhibits?

Attorney Baldwin?

MR. BALDWIN: Mr. Morissette, I don't object to the exhibits. I will for the record state an objection as it relates to at least the third video that Mr. O'Sullivan seeks to admit into the record, not for the video itself, but for the commentary associated with the video.

Mr. O'Sullivan makes a number of comments and statements that are not supported by the video in our view and cannot be taken as the truth. So with that objection, I presume the Siting Council can take in the video for what it's worth, but I would love to see the video is admitted without the commentary.

THE HEARING OFFICER: Thank you, Attorney Baldwin.

Attorney Bachman, would you like to comment on procedurally whether we take it for what it's worth, or have it resubmitted?

MS. BACHMAN: Thank you, Mr. Morissette.

Considering Mr. O'Sullivan actually took
those videos on his own, and he is in here and
available for cross-examination, certainly
Attorney Baldwin could inquire as to any of the
commentary or the accuracy of the commentary. And

1 we could take the exhibit in for what it's worth 2 so that he could ask those questions. 3 Thank you. 4 THE HEARING OFFICER: Thank you, Attorney Bachman. We 5 will take the exhibit in for what it's worth. 6 Thank you. 7 We will now begin with cross-examination of 8 Shawn O'Sullivan by the Council starting with 9 Mr. Cunliffe. 10 MR. CUNLIFFE: Thank you, Mr. Morissette. I'll start 11 with Ms. Gadwa. 12 Ms. Gadwa, in your professional capacity have 13 you prepared a wetland delineation and/or acted as 14 an environmental monitor for a development 15 project? 16 THE WITNESS (Gadwa): I've -- I've done that for many development projects. 17 18 MR. CUNLIFFE: In these projects that you've overseen, 19 did they involve tree clearing? 20 THE WITNESS (Gadwa): Usually they involve tree 21 clearing, yes. 22 MR. CUNLIFFE: Could you describe the extent of the 23 tree clearing for a project in acres potentially? 24 THE WITNESS (Gadwa): It -- it varied greatly and the 25 quality of the forests vary greatly. And -- and

my role was usually as -- as a subcontractor, so I really wasn't responsible for the layout of the plan. I was aiding the wetlands and supervising the forests, and provided information to the wetland commissions as to the -- the impacts on function, the adverse impacts, but I didn't design/determine the extent of clearing.

MR. CUNLIFFE: Understood. Did the projects also require wetland protection measures?

THE WITNESS (Gadwa): Of course they did, yes.

MR. CUNLIFFE: And could you describe some of the measures that you recommended?

THE WITNESS (Gadwa): Well, in -- in particular we recommended -- I -- I would always recommend vegetated upland buffers adjacent to the wetlands allowing for filtration by -- by leaf litter and impervious -- of runoff and -- at the clearing limits of course, sediment barriers, silt fences.

And oftentimes I would recommend depressions on the up side, too, because sediments are -- have a mesh which is porus and allows so that water will pass through and the -- and the fence won't be knocked down.

And this mesh is always larger than the fine sediment particle sizes, the silt and the clay

fraction. So if you -- if sediment silt fences don't have an area, capacity for ponding behind them there's always a release of -- of fine sediment in the runoff that goes through the silt fence even if there's not a real breach and large amounts of sand going through.

And also I -- I take part in the design of stormwater management systems, and we really prefer infiltration basins to plug-type basins because the -- the phosphorus and the fine sediment is much more effectively filtered by soil than it is by simple sedimentation, which can take out -- which removes the larger but not the fine fraction of -- of the -- and the fine fraction has a high proportion of the phosphorus content.

So -- and of course LID, you know, multiple rain gardens is -- is a very good option for wetland protection. And again, that relies on infiltration rather than simple settling followed by release of -- of stormwater with the fines still suspended.

MR. CUNLIFFE: And the example of using infiltration, that would normally require probably more land space?

THE WITNESS (Gadwa): Well, it's -- the suitability,

it's depth to water table and the type of soils really determines whether -- is if is possible. MR. CUNLIFFE: Thank you. THE WITNESS (Gadwa): And here we have this, this massive dense till with very poor permeability over pretty shallow bedrock and it's -- and the soils are just not suitable for infiltration best management practices. MR. CUNLIFFE: Is most of the watershed already developed with housing? THE WITNESS (Gadwa): What? This watershed? MR. CUNLIFFE: This, this watershed that the project is located within, would you characterize it is? THE WITNESS (Gadwa): Well, the land-use? I mean, actually you should -- you should refer to the maps that were attached to my testimony. There there's extensive forests to the west, and actually unbroken forest. 19 And there's also -- there's old farmhouses in 20 the immediate vicinity, though they're -- and a 21 chunk of a wood lot of mostly sugar maples, just a 22 sugar maple bush just down the other side of 23 Gaylord Mountain Road, which is actually connected 24 by this property to the extensive forest to the 25 west.

There, there is an interruption, but -- but it's by the Eversource right-of-way which runs -- runs along the top of the hill. And there are new subdivisions down to the -- to the south on both sides of the -- of Gaylord Mountain Road, but -- but not to the -- not to the north, the northwest, the northeast.

MR. CUNLIFFE: What would be your opinion on how you would differentiate reviewing a housing project development versus a solar project within said watershed?

THE WITNESS (Gadwa): Well, I think the -- (unintelligible).

THE REPORTER: I've lost audio there. This is the Court Reporter.

THE WITNESS (Gadwa): It's pretty much this material, I think. These, the type of very steep slopes and highly erosible soils, the -- the Wilbraham soils are with -- with a high K factor, a high, high proportion of fine particles, which means that they're much more readily suspended by runoff and -- and settled more slowly.

That's not a good idea, not a good site for residential development, or for solar arrays.

Basically the steep sided ridges, traprock ridges

1 or combined traprock -- traprock, or those ridges 2 are better left as forestland. 3 And it's not -- not very often that -- that a 4 hillside of this, of this steepness and rockiness 5 is proposed for -- for development. This has been --6 7 MR. CUNLIFFE: You do recognize the Hunting Ridge Road 8 is just south of that that was recently developed, 9 or, so. So --10 THE WITNESS (Gadwa): Yeah, I'm -- I don't know the 11 exact topography. I think the topography may --12 may have been less, less steep in the area, but I 13 don't know anything about the pre-existing 14 conditions there. But I'm not happy at all when I 15 see residential -- (unintelligible). 16 THE REPORTER: I'm having a little difficulty hearing 17 the witness. Her audio is going in and out. This 18 is the Court Reporter. 19 THE HEARING OFFICER: Thank you. 20 Could you speak clearer, or get closer to the 21 mic, please? 22 THE WITNESS (Gadwa): I think it's pretty close. Okay. 23 The serious issues with development of steep 24 forested ridges, especially when the bedrock is --25 is traprock -- traprock, or traprock are those,

which means that there's much higher potential for plant biodiversity and associated insect biodiversity. But these are natural resources that are of a higher order than some other types of hillsides in -- in the state, many other types of hillsides.

So whether or not it's a solar array or -- or a residential subdivision, it's very problematic to -- to build on that type of topography with that type of bedrock geology, especially if it's in -- if it has a history of being an undisturbed forest as -- as this one does.

MR. CUNLIFFE: So any development that affects a forest and/or a field would also affect the watershed generally?

THE WITNESS (Gadwa): During construction and -- and also post construction for -- especially for the subdivisions, they, of course they'll affect the watershed longterm. Yeah, the water -- the runoff off of a forest is much cleaner, and the groundwater discharge from a forest is much cleaner than from a developed area.

MR. CUNLIFFE: Thank you. In your testimony on page 6
it states, quote, depth to maximum groundwater
should have been measured at the site of the

proposed infiltration basin in the spring. This is the season when erosion risk is highest when protective vegetative cover is not well developed, unquote.

Are you aware that the geotechnical engineering report provided as a response to Council Interrogatory 44 indicates that bore drilling occurred in April of 2020, and that bore number five is located within the infiltration basin which determined a water level of two feet below grade?

THE WITNESS (Gadwa): I actually -- at the time I wrote

my report I had the stormwater report and the -
and the geotechnical report hadn't been submitted

yet, so I wasn't aware of that at the time.

I am aware now, and I -- I just went over that geotechnical report and all the logs for the borings and the -- and the water, and the water level testing for this meeting.

So that is correct. The -- the borings were done in April for the geotechnical report, which is the correct time. And there was -- was one boring from the basin. I think it was -- I'm not sure which one, which number it was, but I think that -- I think that the -- the groundwater was in

most of the basin -- was -- there was one log that had a one and a half-foot depth to groundwater.

Most of them were three feet, but we don't know -- didn't see antecedent rainfall information, but that with the dense till and -- and the low permeability that there's apt to be a temporary perched water table in many instances, which can interfere with the function of the basin in -- if there's, especially if they're back-to-back rate events.

MR. CUNLIFFE: The Petitioner proposes to establish vegetative cover prior to installing the solar panels, the supports and panels. Other measures include swales, the sediment basin, the riprap level spreaders, the erosion control blankets, the core logs hydro-seeded with tackifier.

Would you agree that these measures minimize erosion and sedimentation to the extent feasible?

THE WITNESS (Gadwa): They certainly reduce it. Well, depending with the highly erosives they are -- it's more difficult and they're less effective.

And post -- post construction the shade over the -- cast by the solar arrays is going to interfere with the density of the grass cover and the steepness of the soils, also of the slopes --

will also interfere.

The most, the highest risk of significant sediment loss occurs during the grading period for -- for the -- the road on the -- the entry road off Gaylord Mountain Road, which has got quite a wide swath of where there's going to be grading and -- and significant soil disturbance. And you know, severe rain events during that period are -- present a risk, a substantial risk given the types of soil we have here and the steepness.

And just you can do the universal soil less equations and -- and calculate the higher risk from a situation like this, than from a less, less erosible soil like a Charlton and -- and moderate slopes.

- MR. CUNLIFFE: Would you opine that if there were some proper soils, or amended proper soils would facilitate stabilization?
- THE WITNESS (Gadwa): If the soil -- if a different site with different soils can have a much greater, more -- more effect -- more effective stabilization and -- and less risk of nutrient export, sediment export.

But this site, the soils are what they are.

You can't -- you can't grade. It's the grading of the -- of the existing soils that is the -- presents the risk, and it's that time period when they're -- have just been graded and if other soils were put on top that's wouldn't -- that it's not -- not a practical solution.

MR. CUNLIFFE: Just that the project proposes to cut trees at ground level and leave the root systems in place. How do you view this strategy to minimize soil erosion?

THE WITNESS (Gadwa): Actually there is -- there's a real problem with when you cut trees or cut invasives, for that matter, there, all the roots are -- are left in the ground and then they die and they gradually decompose, and they export dissolved phosphorus, soluble nitrogen.

There's actually -- I remember looking at a USGS book on -- it was -- it was water quality data for thousands of forested sites throughout the -- the Eastern U.S. And there occasionally were ones which had spiked much higher dissolved phosphorus levels. And the commentary pointed out that all of these areas were areas where there was recent logging, because the root systems were in the ground from the dead trees and they were --

their nutrients were going into the groundwater and being exported.

So that what happens is if you -- if you leave the roots in the ground they do hold the soil for a while but they soon die and decompose, and their nutrients go get into the groundwater seepage, and get discharged into the streams that feed Eaton Brook and Whitney, Lake Whitney.

MR. CUNLIFFE: I understand that the tree roots will eventually die and decompose --

THE WITNESS (Gadwa): Yeah, that's right.

MR. CUNLIFFE: -- with these nutrients, but in the meantime there would also be a stabilization of grasses and other forms that would be planted on the ground in place of the disturbance areas.

There would be least a lag time there, probably I would guess -- and we're talking probably years by the time the roots are decomposed enough that you would already be substituting it with new ground cover. So there would be --

THE WITNESS (Gadwa): Well I mean, the roots are -- are not -- there's all sorts of soils between and around the roots. If you -- if you ever -- if you pull out a weed, you'll see lots of soil, and that's still potentially erosible.

And all of the -- it's the, you know, I mean, it -- you know, certainly the presence of the roots lessens it unless there's some sort of, you know, massive landslide or something that, you know, it does -- does hold the ground.

But the -- it's a very different type of soil that you -- that a living, living root complex in forest topsoil is, and the -- the quality of the groundwater that is discharged from that into the downslope and into the headwater streams is just far superior from that that you would find on, you know, under solar arrays and in the grass between the strips.

MR. CUNLIFFE: On the sediment basin this would probably capture most of that runoff.

That would be right?

THE WITNESS (Gadwa): The sediment basin is -- is going to delay the runoff, but there's -- there's going to be just slightly less runoff than there is.

There's -- currently there's a lot of runoff from site and that was observed and photographed by Mr. O'Sullivan, and -- and there will continue to be a lot of runoff from the site.

And -- and Gaylord Mountain Road does not have formal drainage, and when the -- the

1 sediment -- right now the sediment is -- the 2 runoff is very clean and it goes into wetlands 3 across the street, the surface runoff, but that 4 won't be the case at least during the construction 5 period for the solar, for after, after development 6 of the solar array, so. 7 MR. CUNLIFFE: All right. Thank you. I'm going to 8 direct my questions to Mr. O'Sullivan. 9 THE WITNESS (O'Sullivan): Yes, sir. 10 MR. CUNLIFFE: Your videos show the water flows out to 11 Gaylord Mountain Road. How many years have you 12 observed these events? 13 THE WITNESS (O'Sullivan): Twenty-seven. 14 MR. CUNLIFFE: And how often would the water fill the 15 wetland east of Gaylord Mountain Road and flow 16 over the road? 17 THE WITNESS (O'Sullivan): Almost every time it rains I would -- I would say it goes over there. 18 19 on -- if it's a good day of rain it goes over the 20 road. And I will attest --21 MR. CUNLIFFE: (Unintelligible) -- you can continue? 22 THE WITNESS (O'Sullivan): Oh. I will attest that the water runoff is a little bit worse now than it's 23 24 ever been. I don't know if you're aware that in 25 May of 2018 the area -- and I believe it was an E1

1 tornado that hit the area on the southern part of 2 360 Gaylord Mountain Road. 3 So it changed the water pattern then, and the 4 water runoff, because there are literally hundreds 5 of trees that are already down. 6 MR. BALDWIN: Excuse me, Mr. O'Sullivan? 7 Mr. Morissette, Mr. O'Sullivan is not 8 qualified to talk about water patterns and stormwater flows. I think he's outside of his 9 10 comfort zone here, and I'm going to ask that he 11 answer the question more directly. 12 THE HEARING OFFICER: Yes. If you could, 13 Mr. O'Sullivan, please answer the question 14 directly? Thank you. 15 THE WITNESS (O'Sullivan): The question was, how 16 long -- can you read that question again? 17 MR. CUNLIFFE: Yes. Yeah, how often would the water 18 flow into the wetland east of Gaylord Mountain 19 Road and flow over the road? 20 THE WITNESS (O'Sullivan): Every time it rains. 21 MR. CUNLIFFE: And have you had discussions with the 22 Town about the drainage? And what was the Town's 23 response? 24 THE WITNESS (O'Sullivan): I haven't talked to the Town 25 in years about it -- so I have not, but I'm

1	currently talking with them now.
2	MR. CUNLIFFE: Thank you. And do you think that it's
3	possible that the Petitioner's stormwater control
4	measures could mitigate or minimize the existing
5	drainage issues on Gaylord Mountain Road?
6	THE WITNESS (O'Sullivan): In my opinion? No.
7	MR. CUNLIFFE: Thank you. Those are my questions.
8	THE HEARING OFFICER: Thank you, Mr. Cunliffe.
9	We will now continue with cross-examination
10	by Mr. Harder.
11	MR. HARDER: I have no further comments. Thank you.
12	THE HEARING OFFICER: Thank you, Mr. Harder.
13	Now we will continue with Mr. Hannon.
14	Mr. Hannon?
15	MR. HANNON: I have nothing additional to add. Thank
16	you.
17	THE HEARING OFFICER: Thank you. We will now continue
18	with Mr. Nguyen.
19	MR. NGUYEN: No questions, Mr. Morissette. Thank you.
20	THE HEARING OFFICER: Thank you.
21	We will now continue with Mr. Edelson.
22	MR. EDELSON: Thank you, Mr. Chairman. I think my
23	questions for Mr. O'Sullivan were answered, so I'd
24	address these to Ms. Gadwa.
25	And I think you basically said you have now

had a chance to review Exhibit H, the stormwater management. Do you take any exception to any of the calculations or assumptions, or methodology used by the Applicant in preparing that report?

THE WITNESS (Gadwa): Well, I would have done an analysis of -- gluten loading analysis and included some narrative discussion of retention time and proportion of settling.

You know, it's -- it's a plug-flow system and -- but I didn't see any, any issues with the delineation of the drainage areas, or the -- everything seemed to be, you know, following the usual, usual procedures.

I do -- I did note in the -- in the borings for the geotechnical report that there was -MR. EDELSON: I really want to stay with the stormwater.

THE WITNESS (Gadwa): Yeah, so this relates to that,

because there was wide variation in the -- in the

texture of the topsoil, of the top two feet of

soil. Some borings were -- were described as silt

with a little sand, and some were described

with -- as -- as mostly sand with a little silt.

So it was a very heterogeneous drainage area in

terms of soil texture, and soil texture is -- is

so important when it comes to -- to erosion potential.

And the -- just the fact that there's a lot of silt, that there -- I think it was four out of -- borings have the top two feet were predominantly silt, and then -- and I know there was one subanalysis for two borings. That was for structural purposes and that was at -- at a depth of three feet. So it's the -- the top two feet are much finer than the massive subsoil.

But when you -- when you have so much very fine material you -- just the use of basin design with -- with an outlet that has -- has a hydrograph. That releases most of the -- most of the water in, you know, a ten to 14-hour slot. That's not long enough by any means to get to -- to clean that water.

MR. EDELSON: Well, I'm not sure why you're bringing this up. Are you saying this would affect the conclusion of the Applicant as far as from a stormwater perspective?

THE WITNESS (Gadwa): I'm thinking the applicant's conclusion pertains to -- to flooding, and -- but it doesn't -- the stormwater report, some stormwater reports go into stormwater quality to a

larger extent. This one doesn't. This one is
correct -
MR. EDELSON: Well, the reason I'm trying to keep it

MR. EDELSON: Well, the reason I'm trying to keep it to --

THE WITNESS (Gadwa): -- as far as the runoff volume,

that there's no issues with that, but -- but there

are issues with the retention time.

Because if you -- if you hold, hold the water for multiple days, you know, three days or more then -- or have an infiltration system, you will eliminate most of the -- of the fines, but not with this system, not with the current design.

MR. EDELSON: I did want to stay with stormwater because I understand Mr. O'Sullivan's major concern is the flooding across the road, and that this flooding, which as he has attested, has been ongoing for quite some time. The Applicant made it clear they were aware of it.

THE WITNESS (Gadwa): Uh-huh?

MR. EDELSON: And that without the stormwater

management techniques their development would

actually exacerbate it, but their conclusion is

that with what they've put in place and what's

documented in Appendix H -- or Exhibit H indicates

that the situation after development would be better. There would be lower flow.

And I would like to just clarify, lower flow in total -- and I believe a lower rate, and the slower the water is moving the more likely the sediments will fall out before they get into the wetlands across the street.

THE WITNESS (Gadwa): Well, the -- the basin is -- is right close to the street and there's certainly, you know, fine sediments take many, many hours to settle out.

The quantity will be -- and the -- and the rate of flow will be improved by the basin, but the quality will not be improved. The quality will be worse, and the quality will affect the wetlands, because there is so much runoff, surface runoff into the wetlands across the street and then further into the tributaries of Eaton Brook -- and Eaton Brook.

And the -- these fine particles, you -you've seen turbid water and -- and then a mile
down downstream, you know, there's another
crossing of the stream under the road and it's
still turbid. The -- the really fine particles
stay in suspension for long periods and that is

1 one of the reasons why we really shouldn't be building on any steep slopes with Wilbraham with 2 3 these kind of silty soils, or any of the trap 4 slopes. 5 MR. EDELSON: Well, okay. That's your professional 6 opinion, but it's not the law that we work within. 7 So just to clarify --8 THE WITNESS (Gadwa): Well, we didn't really consider 9 the --10 MR. EDELSON: -- for me that you take no exception to 11 the conclusion by the Applicant that -- I think 12 the words are, as a result the proposed solar 13 array will not result in any adverse conditions to 14 the -- I'm sorry, I'm reading from the wrong part. 15 So it's that the post-development peak 16 discharges are less than the pre-development peak 17 discharges. Do you agree with that? 18 THE WITNESS (Gadwa): Yes, I agree with -- with their 19 statements with regard to volume and discharge 20 are -- are correct, but -- but I -- there are 21 serious questions with the quality of the 22 stormwater, and the adverse effects to the 23 downgrading wetland resources for that reason. 24 MR. EDELSON: Okay. So in your report on page 2 you 25 refer to, you know, the mature forest, or mature

trees, and we've heard testimony about the average age of these trees.

THE WITNESS (Gadwa): Uh-huh?

MR. EDELSON: I find myself that -- I believe I've read this before. Mature trees as far as carbon capture do not capture as much carbon as immature trees.

So that from a climate change point of view these trees have really absorbed as much carbon as they're going to absorb and hold. Would you agree with that versus a younger forest?

THE WITNESS (Gadwa): No, that -- actually, that's not true. It's -- it's the tree which has -- a tall tree has a large a volume of foliage and -- and takes in a lot of carbon dioxide to -- to produce that foliage. So that -- and so long as it's continuing to grow and produce a lot of leaves there's -- there's a significant carbon sequestration benefit.

And by the way this isn't like, you know, it's -- this it's a multiage forest. It has a lot of immature trees as well as mature trees, and it has a good substratum as well.

MR. EDELSON: Other people I feel have told us something different, but that's interesting that

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you've seen more of a mix.

THE WITNESS (Gadwa): There, there is -- there's -- a forest that is senescing can reach a point where -- where it's -- where the tree growth slows and -- and the -- the addition of wood, it slows down, that they don't -- they're slowing in diameter. So that, I've read that, too.

But a mature tree, you know, what is a mature tree? A tree, you know, a tree of 16 inches in diameter or better is highly effective carbon at carbon sequestration. It's maybe a five-foot diameter tree, or a four-foot diameter tree that's -- a second tailing is enough.

MR. EDELSON: Okay. I had a little trouble with the Governor's task force when I looked at their final report, which I think came out in November.

THE WITNESS (Gadwa): Uh-huh?

MR. EDELSON: I could not find the reference that you had which I think was in the draft report. Are you aware that are changes that were made between the draft report by the task force on climate change regarding the forest subgroup, between the draft, their draft report and final report? THE WITNESS (Gadwa): Yeah. I am and I -- I haven't read the entire final report yet.

I -- I read

through, you know, the summary of the things that were changed and it -- it didn't --

So what -- what were -- I think that the -- all the -- and I've read these, the final recommendations and they all seem to be the same.

I -- I don't -- I just --

MR. EDELSON: Well, what you quoted, or what you referred to is that their report says that they do not recommend using mature forested sites for solar facilities, and I was unable to find that reference in the final report.

I'm not saying it wasn't there in the draft report. I'm just saying in the final report it was not that clear about mature forested sites, and recommending against that. I mean, I don't want you to try and look it up right now.

THE WITNESS (Gadwa): Yeah. I think that you should look at the -- also the final recommendations, that there was a final forest subgroup report and then there's the integrated final recommendations.

And -- and I did read about they're not recommending putting solar arrays in -- in forested habitats in that synthesized version, that actually comments just went out yesterday on that one.

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    MR. EDELSON: Finally, can I just go back to a question
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         Mr. Cunliffe had -- or proposed regarding the
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         roots, because you got me confused on that?
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    THE WITNESS (Gadwa): Uh-huh.
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    MR. EDELSON: If you were advising someone who was
6
         doing a solar project like this --
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    THE WITNESS (Gadwa): Yeah?
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    MR. EDELSON: -- and you had to remove trees.
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    THE WITNESS (Gadwa): Yeah?
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    MR. EDELSON: Then it's better to keep the roots in the
11
         ground as a stabilizer, or remove the roots prior
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         to putting in the solar array?
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    THE WITNESS (Gadwa): Well, in response to that I would
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         say it would depend what kind of resource is down
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         gradient. If you have a bog or low-nutrient
16
         headwater stream just down the hill from your
17
         solar array, you really don't want to be loading a
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         bunch of nutrients from rotting roots into it.
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    MR. EDELSON: Okay. But I'm really referring to this
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         site.
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    THE WITNESS (Gadwa): But if you're in a level area
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         where there's not that much groundwater movement
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         it, you know, it doesn't -- it wouldn't matter
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         that much. And -- and I think that the benefit of
25
         the stability, soil stability and the -- and the
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reduced disturbance, you know, basically you shouldn't be putting -- shouldn't be building up gradient of that sensitive low-nutrient seepage wetland in the first place.

It should have a wide enough buffer to -- to take up those nutrients, because if there's a buffer of remaining forest of 80 to a hundred feet the trees in that buffer will scavenge whatever nutrients seep out from the roots of the dying trees, the dead roots. Is that clear?

MR. EDELSON: No. I want one or the other. I feel I have an alternative to -- at a site like this I can either say I'm going to remove roots, or I'm not going to remove roots.

From your expertise what would you recommend?

THE WITNESS (Gadwa): I think -- I think removing roots, the process of removing tree roots would be -- result in a tremendous amount of soil disturbance, and the -- the nutrients that would come off, off the soil particles, all the phosphorus, and it would -- that would outweigh the -- any reduced nutrients from rotting tree roots.

MR. EDELSON: Thank you.

I think that's all my questions,

1 Mr. Chairman. Thank you. 2 THE HEARING OFFICER: Thank you, Mr. Edelson. I have a 3 couple of follow-up questions myself starting with 4 Mr. O'Sullivan. 5 The storm event that you recorded, that was on December 25th. Correct? 6 7 THE WITNESS (O'Sullivan): That's correct. 8 THE HEARING OFFICER: Okay. And that was forecasted to 9 be a pretty significant storm event, but it ended 10 up being not as bad as they had forecasted. 11 Do you happen to know how many inches of rain 12 that Hamden got in your area? 13 THE WITNESS (O'Sullivan): I do not at that day. 14 THE HEARING OFFICER: Ms. Gadwa, do you? THE WITNESS (Gadwa): I should have looked it up. 15 I --16 I haven't looked it up. 17 THE HEARING OFFICER: Okay. 18 THE WITNESS (Gadwa): We could. We could -- you could 19 look it up, actually. 20 THE HEARING OFFICER: Well, I'm trying to put the event 21 in relation to other, I'll call them, normal rain 22 events. It wasn't as significant as they 23 forecasted it, but it was a pretty good rain 24 I know my backyard flooded. event. 25 In relation to other storm events and the

runoff that you were seeing coming off the hill, would you say it was greater than normal?

THE WITNESS (O'Sullivan): No, it wasn't any greater than normal. It's -- it's often like that. In fact, the water is running right now down my backyard in those same spots.

THE HEARING OFFICER: Okay. So we don't know at this point what, you know, whether that was a one-year event, a five-year event, or ten -- or I don't think it got into anything above that.

Do you know that?

THE WITNESS (O'Sullivan): I don't -- that that

particular day, I don't think it was more than -
more than -- it was less than two inches, because

I know it was forecasted for substantial rain, but

it didn't rain that much.

THE HEARING OFFICER: Okay. Thank you.

Now Ms. Gadwa, I want to look at your map that you provided in your testimony. And you had testified earlier that on the northwest side of the Eversource right-of-way, that that area is also cleared and sloped.

So I take it that -- my question is, where's all the water coming from? Can you help me using this as a guide to point me in the right direction

as to where you think the runoff is coming from?

THE WITNESS (Gadwa): Well, I mean this is -- you know that you can look at the -- at the maps in the -- in the stormwater report that -- that show the, I guess, it's about -- it's a 37 -- 37.6-acre drainage area that --

MR. EDELSON: Uh-huh.

THE WITNESS (Gadwa): I mean, this is -- this is the side of a ridge, and that the ridge continues upslope and the kind of plateau on the -- on the top, that the Eversource right-of-way is also still sloping up.

So -- so we're basically at the bottom of a mountain here. And that there's some -- some concavity so that there -- so that -- that there, there's water from a fairly large swathe of the -- of the hillside which is coming down into this area. I mean, you can see the -- you're driving along Gaylord Mountain Road. It's -- there's a little valley there just adjacent to the proposed site.

So it's -- it's not surprising. I mean,
most -- most of the traprock mountains and ridges
have wetlands adjacent to them and many of them
have reservoirs and, you know, significant streams

that it's -- there this, the core of the mountain is solid rock. And you know, then it -- it's plastered with very, very massive dense stuff.

So there's -- there's not the infiltration that you have into your typical forest that -- and there's more. There's more natural runoff.

MR. EDELSON: Thank you.

THE WITNESS (Gadwa): But it's clean runoff. It is filtered by the -- by the forest topsoil and -- and all of the leaves, the roots and all the forest vegetation.

And it's -- it's a one -- these ridges are actually a wonderful water source for the -- for the town and the -- and the state. Just think how many traprock ridges have public water supply reservoirs immediately adjacent.

THE HEARING OFFICER: Very good. Thank you for your response. It was very helpful.

We will now continue with cross-examination of Shaw O'Sullivan by the Petitioner Attorney Baldwin. Thank you.

MR. BALDWIN: Thank you, Mr. Morissette.

Mr. O'Sullivan, just to follow up on one of the last questions for Mr. Morissette. In addition to the rainfall on Christmas Day weren't

1 we also dealing with a significant amount of snow 2 melt a couple days prior and during that Christmas 3 Day storm? 4 THE WITNESS (O'Sullivan): There was some snow, yes. 5 MR. BALDWIN: Thank you. And just to be clear, what do 6 you do for a living, Mr. O'Sullivan? 7 THE WITNESS (O'Sullivan): I'm a salesman. 8 MR. BALDWIN: Okay. So you're not a professional 9 engineer? Not a hydrologist? 10 THE WITNESS (O'Sullivan): No, but I have a homeowner. 11 MR. BALDWIN: Okay. 12 THE WITNESS (O'Sullivan): And I've lived there for 27 13 years. 14 MR. BALDWIN: No, understood. And your observations 15 are in the record. 16 It's fair to assume that you've read the petition and the materials in the petition for the 17 18 Gaylord Mountain Solar project? 19 THE WITNESS (O'Sullivan): Yes. 20 MR. BALDWIN: Did you know from reading the petition 21 that the size of the footprint of the developed 22 area of the project is 12.3 acres? Correct? 23 THE WITNESS (O'Sullivan): Yes. 24 MR. BALDWIN: And you heard Ms. Gadwa say just now --25 and I'm not saying that she's accurate, but she

did say is the drainage area, the watershed area was at least 37.6 acres in size.

So if I do the math correctly, that means the project area is about a third of the drainage area for this part of Hamden. Does that sound about right to you?

THE WITNESS (O'Sullivan): I'd say, yes.

MR. BALDWIN: Okay. So some of your comments during the filming on that video, one in particular you said something to the effect, all of this water, and you were referring to the water coming across Gaylord Mountain Road, all of this water is coming from 360 Gaylord Mountain Road. That's not true.

Is it?

THE WITNESS (O'Sullivan): In my opinion it is.

MR. BALDWIN: Let's go back. We've got a 37.6-acre watershed that feeds into this area, as Ms. Gadwa stated, and a 12-acre site. One third of this, of the drainage area comes from this site. Two thirds come from other portions of the area including probably your street.

So again, all of the water is not coming from this, from the property at 360 Gaylord Mountain Road. Is it?

THE WITNESS (O'Sullivan): I'm going to -- I say it is.

1 If you look at where --2 MR. BALDWIN: That's fine. That's your opinion. 3 That's fine. 4 Ms. Gadwa, you're not a professional 5 engineer. Are you? 6 THE WITNESS (Gadwa): I'm a professional wetland 7 scientist and a registered soil scientist, but not 8 an engineer. 9 MR. BALDWIN: I'll take that as a no. 10 THE WITNESS (Gadwa): So I've --11 MR. BALDWIN: I'll ask -- you know, Ms. Gadwa, I'll ask 12 very straightforward questions. 13 THE WITNESS (Gadwa): Uh-huh. 14 MR. BALDWIN: If you can answer them yes or no that 15 would be fantastic. 16 THE WITNESS (Gadwa): Yeah. 17 MR. BALDWIN: You recently appeared before the Siting 18 Council in another petition on behalf of the solar 19 developer down in Madison, Connecticut. Correct? 20 THE WITNESS (Gadwa): Madison? 21 MR. BALDWIN: Petition Number 1354. Where was that 22 project? THE WITNESS (Gadwa): Oh, there -- there was a project 23 24 in Killingworth. 25 MR. BALDWIN: Oh, Killingworth. I'm sorry you're

1 right. But that's petition 1354, you appeared on 2 behalf of the petitioner? 3 THE WITNESS (Gadwa): Yes. 4 MR. BALDWIN: And that project -- again yes or no, that 5 project calls for the development of a 25-acre 6 wooded parcel. I took that from the petition 7 itself. Is that correct? 8 THE WITNESS (Gadwa): I can't remember the acreage. 9 MR. BALDWIN: Okay. That's fine. You mentioned that 10 in your report that you walked the property. Did 11 you try to reach the Petitioner or the property 12 owner before you stepped onto the property without 13 permission? 14 THE WITNESS (Gadwa): I -- I, what I do is I, if I see 15 no-trespassing signs --16 MR. BALDWIN: I understand what your report says, 17 Ms. Gadwa. Did you reach out to the property 18 owner --19 THE WITNESS (Gadwa): No. 20 MR. BALDWIN: Did you reach out to the property owner 21 or the Petitioner before you went on the property? 22 THE WITNESS (Gadwa): No, I didn't. I didn't. 23 seemed to be hiked and used by the neighborhood 24 generally, so. 25 MR. BALDWIN: Okay. That's fine. You make a lot of

1 general statements in your testimony, and you made 2 a bunch of general statements in your testimony 3 this afternoon --4 THE WITNESS (Gadwa): Uh-huh? 5 MS. BACHMAN: -- where you talk about it's much more 6 likely that certain conditions exist, and there's 7 more apt to be certain conditions, kind of these 8 general statements. You haven't performed any 9 detailed assessments or analyses of wildlife or 10 species, groundwater hydrology, stormwater runoff 11 from the subject parcel. Have you? 12 THE WITNESS (Gadwa): I've made observations, but they 13 were constrained by the season. I was not there 14 during the growing season, or the bird breeding 15 season. 16 MR. BALDWIN: So you haven't performed any of those 17 detailed analyses? THE WITNESS (Gadwa): I have. I've done many detailed 18 19 surveys on other ridges with very similar bedrock 20 geology and hydrology, and similar -- similar tree 21 communities. So that one can generalize from --22 MR. BALDWIN: But not here --23 THE WITNESS (Gadwa): -- about communities --24 MR. BALDWIN: I understand. 25 THE WITNESS (Gadwa): -- based on conditions.

1 MR. BALDWIN: Please just answer my question. But not 2 here? 3 THE WITNESS (Gadwa): Just the tree -- just the -- just 4 the tree composition and the surface topography, 5 but not the herb stratum. 6 MR. BALDWIN: Thank you, that's all. 7 Thank you Mr. Morissette. 8 THE HEARING OFFICER: Thank you, Mr. Baldwin. 9 Okay. We will now proceed with the continued 10 appearance of the Petitioner to verify the 11 December 20th late-filed exhibits and the 12 January 5, 2021, supplemental late-filed exhibits 13 that have been submitted marked as Roman numeral 14 2B, items eleven and twelve. 15 Attorney Baldwin, please begin by identifying 16 the new exhibits you have filed in this matter and 17 verifying exhibits by the appropriate sworn 18 witnesses. 19 BRADLEY J. PARSONS, 20 MICHAEL LIBERTINE, 21 MATTHEW GUSTAFSON, 22 recalled as witnesses, having been previously 23 duly sworn by the Executive Director, were 24 examined and testified under oath as 25 follows:

MR. BALDWIN: I will. Thank you, Mr. Morissette.

Again, they're listed in the hearing program. These, if the Council recalls at the last hearing there was a request for some additional information regarding the depth of existing residential wells in the area around the project site as well as the request for some additional mapping information kind of following up on the original late-file exhibit responses and adding additional information to those maps. And those are, the essence of those two new exhibits -- and I think for these purposes we'll just need Mr. Parsons and Mr. Libertine to verify these exhibits.

And so I'll ask them, did you prepare or assist in the preparation, or did you assist with the assemblage of the information contained in what is listed as exhibits eleven and twelve under Roman 2, section B of the hearing program on behalf of the Petitioner? Mr. Parsons?

- THE WITNESS (Parsons): Yes, I did.
- 22 MR. BALDWIN: Mr. Libertine?
- 23 | THE WITNESS (Libertine): Yes.
- 24 MR. BALDWIN: Do you have any corrections,
- modifications or amendments to offer to those

1 exhibits? Mr. Parsons? 2 THE WITNESS (Parsons): No. 3 MR. BALDWIN: And Mr. Libertine? 4 THE WITNESS (Libertine): No. 5 MR. BALDWIN: Is the information in those two exhibits 6 true and accurate to the best of your knowledge? 7 Mr. Parsons? 8 THE WITNESS (Parsons): Yes. 9 MR. BALDWIN: And Mr. Libertine? 10 THE WITNESS (Libertine): Yes. 11 MR. BALDWIN: And do you adopt that information as your 12 testimony in this proceeding? Mr. Parsons? 13 THE WITNESS (Parsons): Yes. 14 MR. BALDWIN: And Mr. Libertine? 15 THE WITNESS (Libertine): Yes. 16 MR. BALDWIN: Thank you, Mr. Morissette. I offer them 17 as full exhibits. 18 THE HEARING OFFICER: Thank you, Attorney Baldwin. 19 Does any intervener object to the admission 20 of the Petitioner's new exhibits? 21 Mr. O'Sullivan? 22 MR. O'SULLIVAN: No. THE HEARING OFFICER: Thank you. The exhibits are 23 24 hereby admitted. 25 We will continue with cross-examination of

the petitioner on the December 30, 2020; and January 5, 2020, late-filed exhibits by the Council. The questions are limited to the late-filed exhibits, and those exhibits only. Thank you.

Mr. Cunliffe?

MR. CUNLIFFE: Thank you Mr. Morissette. I'm going to step a little bit outside that box you just described, Mr. Morissette.

I just wanted to have clarification by the Petitioner to comment on Ms. Gadwa's testimony that critiqued the erosion and sedimentation controls, particularly to the core log with water flowing overtopping it.

Could the core log be installed on top of one another as a strategy, or installed in closer intervals to control water runoff?

THE WITNESS (Parsons): This is Mr. Parsons. It's my opinion that the compost filter socks, slash, core logs are installed at -- at a very shallow interval already. You know, they are -- they will overtop at times during -- during heavier events, but they are installed at a very tighter interval than would normally be done.

MR. CUNLIFFE: And could the perimeter erosion sediment

1 control fences be doubled up to slow the movement of sediment? 2 3 THE WITNESS (Parsons): In -- in this case I feel that 4 the perimeter erosion controls are really 5 consistent of the stormwater swale, slash, 6 temporary diversion that runs along the eastern 7 side of the project limits and eastern side of the 8 disturbed limits, and then funnels down to the 9 south to the stormwater management basin, slash, 10 temporary sediment basin. And those are really 11 serving as our perimeter controls on this site. 12 While there may be silt fence installed in 13 the interim while those two items are -- are being 14 constructed, once those are -- those items are 15 constructed they will serve as the majority of the 16 erosion control function on site. 17 MR. CUNLIFFE: Thank you. That's my question, 18 Mr. Morissette. 19 THE HEARING OFFICER: Thank you, Mr. Cunliffe. 20 We'll now continue with cross-examination by 21 Mr. Harder. 22 I have no other questions. Thank you. MR. HARDER: 23 THE HEARING OFFICER: Thank you. Mr. Hannon? 24 MR. HANNON: I have no questions. Thank you. 25 THE HEARING OFFICER: Mr. Nguyen?

MR. NGUYEN: I have no questions, Mr. Morissette.

Thank you.

THE HEARING OFFICER: Thank you. And Mr. Edelson?
MR. EDELSON: Thank you, Mr. Chairman.

I guess I was a little -- feeling a little dense with regard to the diagram, to show the late file diagram -- or exhibit. There are many, many instances where we've got a red line surrounding a yellow area. And I just -- I could not picture what you were trying to convey there.

The red I assume is the steep part, but I'm trying to understand what's -- because it would look almost very difficult to put the solar arrays where there is, you know, some sort of a shape, you know, almost like a rectangle with the solar arrays going right over these red lines.

So I'm just having a little trouble interpreting that, and if either Mr. Parsons or Mr. Libertine could help, that would be appreciated.

THE WITNESS (Parsons): Not a problem, sir. This is Mr. Parsons.

The -- the red lines on I believe where we're referring to -- let's look at the first exhibit of that Exhibit 1A, labeled 1A. Those red lines

around the -- the colored yellow areas are the areas of solar, it was the way we were able to identify the area is solar panels that are on grades greater than 15 percent. So it was really just to identify.

And I believe one of the questions at one point in time during the proceedings was what area -- how many -- what's the total area of solar panels that is on grades greater than 15 percent? And that's -- that's really what that is defining.

- MR. EDELSON: Okay. But it's not indicating -- because the key at the bottom got me nervous because red is associated with slopes of greater than 30 percent.
- THE WITNESS (Parsons): Correct, yeah.

- MR. EDELSON: But that's not what you're trying to do with the red line?
 - THE WITNESS (Parsons): No, if you -- if you look at

 the -- on that same exhibit the top callout on the

 right-hand side of the plan points to that red

 line around the -- around the yellow area.

And -- and that's what we were trying to call it with -- with that callout where's it's says a ray area with slopes above 15 percent plus or minus .34 acres, which is plus or minus 4 percent

of the fenced-in area.

MR. EDELSON: I missed that. Thank you.

THE WITNESS (Parsons): No problem.

MR. EDELSON: And so I had a question, though -hopefully, Mr. Chairman, it's okay to ask about
the other late submission which was a letter from
Senator Looney, which once again referred to
concerns about woodchips.

And if memory serves me well, when we last spoke at the last hearing it indicated there was a misunderstanding about the amount of material that would be woodchipped. And I would be interested in your observation about Senator Looney and whether his concern about -- it seems to be related to taking all of the trees and leaving -- or creating woodchips from them and then just leaving them to decompose.

Do you feel like he's misunderstood what your plan is based on -- and again, this is to clarify. I forgot who was submitting the concern. I think it was the Hamden Tree Commission that all of this woodchipping was going to go on. Could you clarify what do you think is going on here?

THE WITNESS (Parsons): Just give me one minute. I'm just reviewing the correspondence again.

MR. EDELSON: Okay. Thank you.

MR. BALDWIN: I believe also, Mr. Edelson, that

Mr. Gustafson also participated in the discussion

of the woodchipping issue. And it was discussed

as a part of the Hamden Tree Commission letter and

comments reiterated by Senator Looney.

THE WITNESS (Parsons): Yeah, and I believe in our -in our piece here our intent was not to leave
the -- the woodchips behind in -- in this case.

And Matt, if you want to jump in here, too?

THE WITNESS (Gustafson): Sure. This is -- for the record, this is Matthew Gustafson. Per the testimony of the previous hearing, the intent is for any wood material that can be used or -- or sold off as timber likely where feasible would be.

It's certainly not the intent of the Applicant to whole-tree, which is everything on site. And anything that does fall into the category of being chipped is not intended to be left on site. That material would be removed primarily.

THE WITNESS (Parsons): I would just -- I would add

that any woodchips could possibly be used for

temporary stabilization, however in order to gain

permanent stabilization on site the woodchips

1 would need to be removed to achieve that, that 2 permanent stabilization. 3 MR. EDELSON: Okay. I mean, the topic comes up -- and 4 I apologize that I wasn't able to clarify this. 5 You know we see so many different applications, 6 but I don't think in this petition you did a 7 particular carbon offset analysis. Is that 8 correct? Or is that there and I just couldn't 9 find that exhibit? 10 THE WITNESS (Gustafson): The -- a carbon study had 11 been performed, and it's been provided. As I 12 believe question 50 in the inter -- first 13 interrogatory set, which is -- and maybe Ken can 14 help me on the exhibit number for that? 15 MR. BALDWIN: Exhibit Number 2. 16 THE WITNESS (Gustafson): Thank you. 17 MR. BALDWIN: That's one of our interrogatory 18 responses, response number 50, Mr. Edelson. 19 MR. EDELSON: Okay. And so that analysis is consistent 20 with what Mr. Gustafson is saying about woodchips, 21 you know, that most of the trees or most of the 22 woody biomass that has economic potential would be removed from the site and not left to decompose? 23 24 THE WITNESS (Gustafson): That is correct. 25 MR. EDELSON: Okay. Thank you, Mr. Chairman. I think

that's all the questions I have right now.

THE HEARING OFFICER: Thank you, Mr. Edelson.

I have no further questions, so at this time we will continue with cross-examination of the Petitioner on the December 30, 2020; and January 5, 2021, late-file exhibits by Shawn O'Sullivan.

Mr. O'Sullivan?

MR. O'SULLIVAN: Yes. So on those, is this where I get to ask questions? I have to ask you a point of -THE HEARING OFFICER: Yes, please proceed.

MR. O'SULLIVAN: Okay. So at the last evidentiary
hearing the Petitioner had said that they were not
aware of any water runoff. I believe is was the
Parsons that had said that.

Have you seen the videos, Mr. Parsons?

MR. BALDWIN: Mr. Morissette, I'm going to object to the question again. I believe the questions are limited to the two new exhibits that were submitted. Those two exhibits are the two maps showing the steepness of the grades on the site as it relates to the solar panels and the well depth information.

THE HEARING OFFICER: Yes. Thank you, Mr. Baldwin, however the Council itself and staff had breached

1 the requirement. So I'll allow some questioning, 2 but Mr. O'Sullivan, if you could keep it limited I would appreciate it. Thank you. 3 4 MR. O'SULLIVAN: Yes, sir. 5 MR. BALDWIN: Just so we're clear, Mr. Morissette, the 6 question relates to Mr. Parson's review and 7 feedback on the videos that Mr. O'Sullivan 8 submitted. Thank you. 9 THE HEARING OFFICER: Please proceed, Mr. O'Sullivan. 10 MR. O'SULLIVAN: Okay. So I would like to ask the 11 Petitioner, in your plans on Exhibit H was that 12 amount of water runoff in your plans? 13 THE WITNESS (Parsons): Can -- can you explain the 14 question? Was it -- was it accounted for? 15 MR. O'SULLIVAN: Was it accounted for and expected, 16 that much water runoff? 17 THE WITNESS (Parsons): The -- the stormwater design 18 was -- was done in accordance with the 2004 19 stormwater quality manual, and we went through 20 the -- the storm events all the way up to the --21 the hundred-year storm event. 22 I can refer to my drainage report to find out 23 what the amount of precipitation that is, if you 24 would -- if you would like. But yes, I mean, 25 the -- the water runoff on site was considered.

The drainage area getting to the analysis point as it leaves the site, as Ms. Gadwa had referenced, is approximately 37.6 acres.

I can't say that the -- I did -- after reviewing your, the videos there that were submitted I went; I looked at what was the -- the drainage area, approximate drainage area reaching the east side of Gaylord Mountain Road.

And while the -- the calculation was very quick in -- in desktop the drainage area reaching the west side of Gaylord Mountain Road immediate from the site where you were standing there, sir, was approximately 50 acres.

So there's an additional, you know, 15 to -15 acres or so that is not coming through what was
put through our stormwater analysis.

MR. O'SULLIVAN: So one last question. I have lived there now 27 years. I don't care what Mr. Baldwin says. I will attest that the water runoff is much worse now with only a few trees being knocked down from the hurricane. So since I heard -- I'm sorry, tornado.

Since the tornado came through it's changed the pattern. It used to just run through my backyard through the trench. Now it comes across

my yard into my neighbor's yard.

water runoff less and control it?
THE WITNESS (Parsons): Well, what -- what are we -what are we referring to, Mr. O'Sullivan,
specifically? Is it referring -- are we referring
to your rut, to your yard? Or are we referring to
the site -- the runoff then and the tornado that
you were --

Do you really think that you can make this

MR. O'SULLIVAN: I'm talking about the site runoff.

Since you, when you cut those trees down -- with
the future of the trees that are down now it's
made it worse. When you cut all those trees down
it's going to get worse.

How are you going to control that?

THE WITNESS (Parsons): Well, what I -- what I can say is that -- that there are trees down now and there is no stormwater controls that were put in place to -- to manage those trees potentially going down.

Whether that has an exact effect on -- on the drainage, I -- I don't have a good and a well answer for that. However, I can say that we are, for the trees that we are removing, we are installing stormwater management systems to

control that runoff and -- and account for that, and that's clearly documented in our -- our stormwater report.

Furthermore, with regards to the -- the runoff on your property specifically, if you were to truly look at our stormwater report, it would be the topography on site. There is a -- the drainage line actually runs right along the property line.

In reviewing the topography in that area and the video from the 15th that you showed there, you know, it does highlight the existing stone trench that is -- is on your property. That stone trench is visible from the aerial photography obviously.

It also does, not only extend along the south side of your property, but actually -- or sorry, the north side of your grass, but as it -- it heads to the west along the north side of your -- your grass, it actually turns south and -- and runs south for another 40 feet mainly catching water runoff from your neighbor's property to the north.

And furthermore, if you actually review the topography on a micro topography detail it does appear that your neighbor installed a shed at some

point in time. And in a portion -- installing that shed it does actually appear like he may have built up some of the topography on the west side of his shed. That is actually possibly collecting upland runoff from the wetland four, which is just about a hundred feet from your property line. So it's -- and on his property in some cases.

So it's -- it really does not appear in all the analyses that I've done on this project that any runoff from our site is leaving our property and -- and heading onto your property, from what I can tell.

- MR. O'SULLIVAN: I'm going to disagree with that. I

 don't know if I would be allowed to send another

 video in? I have a video that shows the water is

 coming from -- it starts off at the wetland that's

 on the south end of the property, runs down, turns

 into my property and then turns back, back around

 out to my neighbor's yard.
- THE HEARING OFFICER: Unfortunately, Mr. O'Sullivan, we're not accepting any more late files.
- MR. O'SULLIVAN: All right. Well, I will disagree with that. The water is not coming from my neighbor's property.

And it's too -- it's actually dangerous to

walk back there now with the trees that are
leaning, but I did take the video of that, so.
And that was, I just had one question -- and that
would be my last question.

THE HEARING OFFICER: Thank you, Mr. O'Sullivan.

Okay. Before closing the evidentiary record in this matter the Connecticut Siting Council announces that briefs and proposed findings of facts may be filed with the Council by any party or intervener no later than February 6, 2021. The submission of briefs or proposed findings of fact are not required by this Council. Rather, we leave it to the choice of the parties and interveners.

Anyone who has not become a party or intervener, but who desires to make his or her views known to the Council may file written statements with the Council within 30 days of the date hereof.

The Council will issue draft finding of facts and thereafter parties and interveners may identify errors or inconsistencies between the Council's draft finding of facts and the record, however no new information, no new evidence, no argument and no reply briefs without permission

will be considered by the Council. I hereby declare this hearing adjourned. Thank you everyone for your participation. (End: 3:19 p.m.)

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CERTIFICATE

I hereby certify that the foregoing 62 Pages are a complete and accurate computer-aided transcription of my original verbatim notes taken of the Zoom Remote Siting Council Meeting (Teleconference) in Re: CONNECTICUT SITING COUNCIL PETITION NO. 1425, GAYLORD MOUNTAIN SOLAR PROJECT 2019, LLC, PETITION FOR A DECLARATORY RULING, PURSUANT TO CONNECTICUT GENERAL STATUTES §4-176 AND §16-50K, FOR THE PROPOSED CONSTRUCTION, MAINTENANCE AND OPERATION OF A 1.9-MEGAWATT AC SOLAR PHOTOVOLTAIC ELECTRIC GENERATING FACILITY LOCATED AT 360 GAYLORD MOUNTAIN ROAD IN HAMDEN, CONNECTICUT, AND ASSOCIATED ELECTRICAL INTERCONNECTION, which was held before JOHN MORISSETTE, Member and Presiding Officer, on January 7, 2021.

Robert G. Dixon, CVR-M 857

Notary Public

BCT Reporting, LLC

55 Whiting Street, Suite 1A

Plainville, CT 06062

My Commission Expires: 6/30/2025

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